

CLAIMS

What is claimed is:

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1. A method of providing an embedded web server for a device, comprising the steps of:
 - (A) providing a web server class library and a virtual machine class library, wherein the web server class library and the virtual machine class library include classes for different web applications;
 - (B) identifying a particular web application to be run on the device;
 - (C) compiling the web server by selecting from the web server class library and the virtual machine class library classes required to run the web application in the device to form the web server, wherein the web server is an application-specific web server and requires minimized storage space when embedded in the device.
 2. The method of claim 1, wherein the step (C) further comprises the step of sending the libraries and the web application through a compiler to select the required classes from the libraries.
 3. The method of claim 1, wherein for each of the libraries, the step (C) is performed by
 - (I) identifying from the library a class required to run the web application;
 - (II) extracting from the class file of the required class other classes required to run the required class;
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(III) repeating the steps (I) and (II) for each of the required classes until the required class is a base class;

(IV) collecting all the required classes to form the application-specific web server.

4 The method of claim 1, wherein the device is an electronic device and the application-specific web server is embedded in the device.

5 The method of claim 1, wherein the device runs a plurality of web applications, including the particular web application, wherein the step (C) compiles the web server by selecting from the web server class library and the virtual machine class library classes required to run all of the web applications in the device to form the web server.

6 A system for providing a web server for a device running a web application, comprising:

(A) a web server class library and a virtual machine class library, each including classes for different web applications;

(B) a compiler that receives the libraries and the web application to select from the web server class library and the virtual machine class library classes required to run the web application in the device to form the web server such that the web server is an application-specific web server and requires minimized storage space when embedded in the device.

7 The system of claim 6, wherein the device is an electronic device

and the application-specific web server is embedded in the device.

8. The system of claim 6, wherein the compiler selects the required classes from each of the libraries by

- (I) identifying from the library a class required to run the web application;
- (II) extracting from the class file of the required class other classes required to run the required class;
- (III) repeating the steps (I) and (II) for each of the required classes until the required class is a base class;
- (IV) collecting all the required classes to form the application-specific web server.

9. The system of claim 6, wherein the device runs a plurality of web applications, including the particular web application, wherein the compiler compiles the web server for running all of the plurality of web applications by selecting from the libraries classes required to run all of the plurality of web applications.

Sub 93 10. A web server structure for a device, comprising:

- (A) a web application that performs a predetermined web function;
- (B) an application-specific web server core and an application-specific virtual machine that together execute the web application on the device, wherein the application-specific web server core and the application-specific virtual machine are specifically configured for the application such that they require

minimized storage space when embedded in the device.

11. The web server structure of claim 10, wherein the device is an electronic device and the application-specific web server structure is embedded in the device.

12. The web server structure of claim 10, further comprising a plurality of web applications, including the particular web application, wherein the application-specific web server core and virtual machine are specifically configured to run the applications such that they require minimized storage space when embedded in the device.

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